

Philanthropist urges area experts to solve mind's biggest mysteries

By Bruce Lieberman

UNION-TRIBUNE STAFF WRITER

November 5, 2004

Praising San Diego as a world powerhouse in brain science, the namesake of a new UCSD institute called on the region's brightest minds yesterday to solve the mind's biggest mysteries.

The remarks of Fred Kavli came during an inauguration ceremony for The Kavli Institute for Brain and Mind at the University of California San Diego. The institute was first announced in March.

Kavli, 77, a Norwegian-born physicist and a former industrialist, donated \$7.5 million to establish it.

The institute will join the talents of a broad spectrum of scholars to study basic questions about the brain – among them how brains repair themselves, how a person's genes govern the nervous system, and the biological foundations of attention, learning, memory and consciousness.

Gaining an understanding will help scientists rethink how society deals with physical and mental disorders, learning disabilities, emotional trauma – even the psychology of consumerism, aggression and violence, said Nicholas Spitzer, co-director of the new institute and a UCSD professor of biology.

"Our goal is unabashedly ambitious: it's to understand the processes by which the brain, arguably the most complex physical system in the universe, gives rise to the mind, arguably the most complex behavior in the universe," said Jeffrey Elman, also co-director of the institute and associate dean of UCSD's Division of Social Sciences.

Scientists have become experts at reducing a problem to its individual parts, but the Kavli Institute is about considering some of nature's biggest questions as a whole, he said.

"The strategy of reductionism has served science well . . . but at some point we need to put the parts back together," Elman said.

"This requires collaborations of a very daring sort, (among) philosophers and biologists, linguists and molecular geneticists, cognitive scientists, psychologists, anthropologists and computer scientists – among many others.

"In many respects, it's an uphill battle (because) it goes against the grain of traditional science."



JIM BAIRD / Union-Tribune

Fred Kavli, founder and chairman of the board of the Kavli Foundation, made his way through the UCSD reception crowd.

- [Record-setting donation to boost 3-year-old pharmacy program](#)

The institute's two major goals are to encourage innovative research that relies on collaborations across academic fields, and to train young researchers through lectures, workshops, summer programs and academic boot camps.

Before the ceremony yesterday, Kavli, of Santa Barbara, said he recognized the need for private investment in basic research when he established the Kavli Foundation in 2000.

He made a fortune through his former company, Kavlico Corp., one of the world's largest suppliers of sensors for the aeronautical and automotive industries. He sold it in 2000.

"I've had a long journey through the business world," Kavli said. "I had planned to start a foundation for a long time, thinking that basically it wouldn't fulfill my life just to make money in business."

Since 2000, the Kavli Foundation has spent about \$100 million to establish research institutes around the world in three primary areas: astrophysics, nanotechnology and the neurosciences.

Besides UCSD, the foundation has established institutes at UC Santa Barbara, Stanford, Cornell, Columbia and Yale universities, the University of Chicago, the Massachusetts and California institutes of technology, and Delft University of Technology in Holland.

At the UCSD ceremony yesterday, held in the lobby of the university's Natural Sciences Building, Kavli told the scientists and other scholars that he was entrusting them to go after the big questions.

"The brain and mind hold the most complex and baffling secrets of nature, and we only have one tool to investigate it – that is, the brain and mind," Kavli said.

"It must investigate itself. And I know you will put it to the ultimate test."

More information about the Kavli Institute can be found on the Web at kibm.ucsd.edu